What is claimed is:

1   1. A service providing method of providing a current user of

2   a first apparatus with each of services that are provided by

3   a plurality of other apparatuses via a network, the first

4   apparatus being able to communicate with each of the plurality

5   of other apparatuses via the network and being locally

6   connectable to a recording medium, out of recording media that

7   are uniquely assigned to users of the first apparatus, each

8   recording medium being transportable and including an area

9   for storing unique information,

10   the service providing method comprising:

11   a service requesting step where the first apparatus

12   requests a second apparatus to provide a service desired by

13   the current user, the second apparatus being one of the plurality

14   of other apparatuses;

15   a unique information reading step where if a recording

16   medium of the current user is locally connected to the first

17   apparatus and stores unique information, the second apparatus

18   reads the unique information in the locally connected recording

19   medium via the first apparatus and the network; and

20   a service providing step where the second apparatus

21   customizes the desired service according to the read unique

22   information and transmits the customized service to the first

23   apparatus.

1   2. The service providing method of Claim 1,

2   wherein in the unique information reading step, if

3   no unique information is stored in the locally connected

4   recording medium or no recording medium is locally connected

5   to the first apparatus, the second apparatus does not read

6   unique information from anywhere, and

7   in the service providing step, if no unique information

8   has been read in the unique information reading step, the second

9   apparatus transmits the desired service to the first apparatus

10   in an uncustomized state.

1   3. The service providing method of Claim 2,

2   wherein the unique information stored in each recording

3   medium includes user information that is inherent in a user

4   assigned the recording medium, and

5   in the service providing step, the second apparatus

6   customizes the desired service for the current user according

7   to the user information included in the read unique information

8   and transmits the customized service to the first apparatus.

1   4. The service providing method of Claim 3 further comprising:

2   a user information updating step, performed after the

3   unique information reading step, where if the user information

4   inherent in the current user needs to be updated, the second

5   apparatus updates the user information included in the read

6   unique information and overwrites the user information in the

7 locally connected recording medium with the updated user

8 information via the network and the first apparatus.

1 5. The service providing method of Claim 4,

2   wherein the user information in each recording medium

3 .has been encrypted using a public key of a public key

4 cryptosystem,

5   the second apparatus stores a secret key corresponding

6 to the public key,

7   .   in the service providing step, the second apparatus

8 decrypts the encrypted user information using the secret key

9 and customizes the desired service according to the decrypted

10 . user information, and ·   .

11   in the user information updating step, the second

12 apparatus updates the decrypted user information, encrypts   .

13 the updated user information using the public key, and overwrites

14 the encrypted user information in the locally connected

15 recording medium with the updated and encrypted user information.

1 6. The service providing method of Claim 5,

2   wherein the network is the Internet,

3   the first apparatus is an Internet terminal that runs

4 a specialized Internet browser,

5   each of the plurality of other apparatuses is a Web

6 site,

7   the unique information stored in each recording medium

8   includes cookie information used through the Internet browser,

9   and

10   each recording medium stores the cookie information

11 as a file.

1   7. The service providing method of Claim 2,

2   wherein the unique information stored in each recording

3   medium includes a media identifier of the recording medium,

4   the second apparatus stores user information so that

5   user information inherent in each user is associated with the

6   media identifier of the recording medium assigned to the user,

7   and

8   the service providing step includes:

9   a user information finding substep where the second

10 apparatus finds user information associated with the media

11 identifier included in the read unique information; and

12   a customizing substep where the second apparatus

13 customizes the desired service for the current user according

14 to the found user information.

1   8. The service providing method of Claim 1 further comprising:

2   a recording medium connection step, performed before

3   the service requesting step, where the first apparatus is locally

4   connected to the recording medium assigned to the current user.

1   9. The service providing method of Claim 8,

2   wherein the unique information stored in each recording

3   medium includes a media identifier of the recording medium

4   and user information that is inherent in a user assigned the

5   recording medium, the user information having been encrypted,

6   and

7   the service providing step includes:

8   a user password receiving substep where the second

9   apparatus receives a user password from the current user via

10 the first apparatus;

11   a decryption key generating substep where the second

12 apparatus generates a decryption key from the media identifier

13 included in the read unique information and the received user

14 password;

15   a decryption substep where the second apparatus decrypts

16 the encrypted user information included in the read unique

17 information using the generated decryption key; and

18   a customizing substep where the second apparatus

19 customizes the desired service for the current user according

20 to the decrypted user information.

1   10. The service providing method of Claim 9,

2   wherein each recording medium includes a secure data

3   area,

4   the media identifier of each recording medium is stored

5   in the secure data area of the recording medium, and

6   the unique information reading step includes:

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7   a device authentication substep where a device

8   authentication is performed between the first apparatus and

9   the locally connected recording medium; and

10   a reading prohibition substep where, if the device

11   authentication has ended in failure, the second apparatus is

12   prohibited to read data from the secure data area of the locally

13   connected recording medium.

1   11. A service providing method used by a first apparatus that

2   receives each of services that are provided by a plurality

3   of other apparatuses via a network and provides the received

4   service to a current user of the first apparatus, the first

5   apparatus being able to communicate with each of the plurality

6   of other apparatuses via the network and being locally

7   connectable to a recording medium, out of recording media that

8   are uniquely assigned to users of the first apparatus, each

9   recording medium being transportable and including an area

10   for storing unique information,

11   the service providing method comprising:

12   a service requesting step where the first apparatus

13   requests a second apparatus to provide a service desired by

14   the current user, the second apparatus being one of the plurality

15   of other apparatuses;

16   a unique information transmitting step where if a

17   recording medium of the current user is locally connected to

18   the first apparatus and stores unique information, the first

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19 apparatus reads the unique information in the locally connected

20 recording medium and transmits the read unique information

21 to the second apparatus via the network; and

22   a service providing step where the first apparatus

23 receives a customized service from the second apparatus and

24 provides the received service to the current user, wherein

25 the customized service is generated at the second apparatus

26 by customizing the desired service according to the transmitted

27 unique information.

1   12. The service providing method of Claim 11,

2   wherein in the unique information transmitting step,

3   if no unique information is stored in the locally connected

4   recording medium or no recording medium is locally connected

5   to the first apparatus, the first apparatus does not read unique

6   information from anywhere, and

7   in the service providing step, if having transmitted

8   no unique information in the unique information transmitting

9   step, the first apparatus receives the desired service from

10 the second apparatus in an uncustomized state and provides

11 the received service to the current user.

1   13. The service providing method of Claim 12,

2   wherein the unique information stored in each recording

3   medium includes user information that is inherent in a user

4   assigned the recording medium, and

5   the customized service that is received and provided

6   in the service providing step is generated at the second apparatus

7   by customizing the desired service for the current user according

8   to the user information included in the transmitted unique

9   information.

1   14. The service providing method of Claim 13 further comprising:

2   a user information updating step, performed after the

3   unique information transmitting step, where if the user

4   information inherent in the current user needs to be updated,

5   the first apparatus receives updated user information from

6   the second apparatus and overwrites the user information in

7   the locally connected recording medium with the updated user

8   information.

1   15. The service providing method of Claim 14,

2   wherein the user information in each recording medium

3   has been encrypted using a public key of a public key

4   cryptosystem,

5   the second apparatus stores a secret key corresponding

6   to the public key,

7   the customized service that is received and provided

8   in the service providing step is generated at the second apparatus

9   by decrypting the encrypted user information included in the

10   transmitted unique information using the secret key and

11   customizing the desired service according to the decrypted

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12 user information, and

13   the updated user information received from the second

14 apparatus in the user information updating step is generated

15 at the second apparatus by updating the decrypted user

16 information and encrypting the updated user information using

17 the public key.

1 16. The service providing method of Claim 15,

2   wherein the network is the Internet,

3   the first apparatus is an Internet terminal that runs

4 a specialized Internet browser,

5   each of the plurality of other apparatuses is a Web

6 site,

7   the unique information stored in each recording medium

8 includes cookie information used through the Internet browser,

9 and

10   each recording medium stores the cookie information

11 as a file.

1 17. The service providing method of Claim 12,

2   wherein the unique information stored in each recording

3 medium includes a media identifier of the recording medium,

4   the second apparatus stores user information so that

5 user information inherent in each user is associated with the

6 media identifier of the recording medium assigned to the user,

7 and

8   the customized service that is received and provided

9   in the service providing step is generated at the second apparatus

10 by finding user information associated with the media identifier

11 included in the transmitted unique information and customizing

12 the desired service for the current user according to the found

13 user information.

1   18. The service providing method of Claim 11 further comprising:

2   a recording medium connection step, performed before

3   the service requesting step, where the first apparatus is locally

4   connected to the recording medium assigned to the current user.

1   19. The service providing method of Claim 18,.

2   wherein the unique information stored in each recording

3   medium includes a media identifier of the recording medium

4   and user information that is inherent in a user assigned the

5   recording medium, the user information having been encrypted,

6   and

7   the service providing step includes:

8   a user password receiving substep where a user password

9   is received from the current user,

10   wherein the customized service that is received and

11 provided in the service providing step is generated at the

12 second apparatus by generating a decryption key from the media

13 identifier included in the transmitted unique information and

14 the received user password, decrypting the encrypted user

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15 information included in the transmitted unique information

16 using the generated decryption key, and customizing the desired

17 service for the current user according to the decrypted user

18 information.

1   20. The service providing method of Claim 19,

2   wherein each recording medium includes a secure data

3   area,

4   the media identifier of each recording medium is stored

5   in the secure data area of the recording medium, and

6   the unique information transmitting step includes:

7   a device authentication substep where a device

8   authentication is performed between the first apparatus and

9   the locally connected recording medium; and

10   . a transmitting prohibition substep where, if the device

11 authentication has ended in failure, the first apparatus is

12 prohibited. to transmit data in the secure data area of the

13 locally connected recording medium.

1   21. A service providing apparatus that receives each of services

2   that are provided by a plurality of other apparatuses via a

3   network and provides the received service to a current user

4   of the service providing apparatus, the service providing

5   apparatus being able to communicate with each of the plurality

6   of other apparatuses via the network and being locally

7   connectable to a recording medium, out of recording media that

8 are uniquely assigned to users of the service providing apparatus,

9 each recording medium being transportable and including an

10 area for storing unique information

11   the service providing apparatus comprising:

12   a service requesting unit operable to request a specific

13 apparatus, out of the plurality of other apparatuses, to provide

14 a service desired by the current user;

15   a unique information transmitting unit operable to

16 read, if a recording medium of the current user is locally

17 connected to the service providing apparatus and stores unique

18 information, the unique information in the locally connected

19 recording medium and transmit the read unique information to

20 the specific apparatus via the network; and

21   a service providing unit operable to receive a customized

22 service from the specific apparatus and provide the received

23 service to the current user, wherein the customized service

24 is generated at the specific apparatus by customizing the desired

25 service according to the transmitted unique information.

1 22. The service providing apparatus of Claim 21,

2   wherein if no unique information is stored in the locally

3 connected recording medium or no recording medium is locally

4 connected to the service providing apparatus, the unique

5 information transmitting unit does not read unique information

6 from anywhere, and

7   if the unique information transmitting unit has

8   transmitted no unique information, the service providing unit

9   receives the desired service from the specific apparatus in

10 an uncustomized state and provides the received service to

11 the current user.

1   23. The service providing apparatus of Claim 22,

2   wherein the unique information stored in each recording

3   medium includes user information that is inherent in a user

4   assigned the recording medium, and

5   the customized service that is received and provided

6   by the service providing unit is generated at the specific

7   ·apparatus by customizing the desired service for the current

8   user according to the user information included in the

9   transmitted unique information.

1   24. The service providing apparatus of Claim 23 further

2   comprising:

3   a user information updating unit operable to receive,

4   if the user information inherent in the current user needs

5   to be updated, updated user information from the specific

6   apparatus and overwrite the user information in the locally

7   connected recording medium with the updated user information.

1   25. The service providing apparatus of Claim 24,

2   wherein the user information in each recording medium

3   · has been encrypted using a public key of a public key

4   cryptosystem,

5   the specific apparatus stores a secret key corresponding

6   to the public key,

7   the customized service that is received and provided

8   by the service providing unit is generated at the specific

9   apparatus by decrypting the encrypted user information included

10   in the transmitted unique information using the secret key

11   and customizing the desired service according to the decrypted

12   user information, and

13   the updated user information received from the specific

14   apparatus by the user information updating unit is generated

15   at the specific apparatus by updating the decrypted user

16   information and encrypting the updated user information using

17   the public key.

1   26. The service providing apparatus of Claim 25,

2   wherein the network is the Internet,

3   the service providing apparatus is an Internet terminal

4   that runs a specialized Internet browser,

5   each of the plurality of other apparatuses is a Web

6   site,

7   the unique information stored in each recording medium

8   includes cookie information used through the Internet browser,

9   and

10   each recording medium stores the cookie information

11   as a file.

1   27. The service providing apparatus of Claim 22,

2   wherein the unique information stored in each recording

3   medium includes a media identifier of the recording medium,

4   .   the specific apparatus stores user information so that

5   user information inherent in each user is associated with the

6   media identifier.of the recording medium assigned to the user,

7   and

8   the customized service that is received and provided

9   by the service providing unit is generated at the specific

10   apparatus by finding user information associated with the media

11   identifier included in the transmitted unique information and

12   customizing the desired service for the current user according

13   to the found user information.

1   28. The service providing apparatus of Claim 21 further

2   comprising:

3   a recording medium connection unit operable to locally

4   connect the service providing apparatus to the recording medium

5   assigned to the current user.

1   29. The service providing apparatus of Claim 28,

2   wherein the unique information stored in each recording

3   medium includes a media identifier of the recording medium

4   and user information.that is inherent in a user assigned the.

5   recording medium, the user information having been encrypted,

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6   and

7   the service providing unit includes:

8   a user password receiving unit operable to receive

9   a user password from the current user,

10   wherein the customized service that is received and

11   provided by the service providing unit is generated at the

12   specific apparatus by generating a decryption key from the

13   media identifier included in the transmitted unique information

14   and the received user password, decrypting the encrypted user

15   information included in the transmitted unique information

16   using the generated decryption key, and customizing the desired .

17   service for the current user according to the decrypted user

18   information.

1   30. The service providing apparatus of Claim 29,

2   wherein each recording medium includes a secure data

3   area,

4   the media identifier of each recording medium is stored

5   in the secure data area of the recording medium, and

6   the unique information transmitting unit includes:

7   a device authentication unit operable to perform a

8   device authentication between the service providing apparatus

9   and the locally connected recording medium; and

10   a transmitting prohibition unit operable to prohibit,

11   if the device authentication has ended in failure, transmission

12   of data in the secure data area of the locally connected recording

13   medium.

1   31. A recording medium which records a service providing program

2   that has a first apparatus execute a procedure for receiving

3   each of services that are provided by a plurality of other

4   apparatuses via a network and providing the received service

5   to a current user of the first apparatus, the first apparatus

6   being able to communicate with each of the plurality of other

7   apparatuses via the network and being locally connectable to

8   a recording medium, out of recording media that are uniquely

9   assigned to users of the first apparatus, each recording medium

10   being transportable and including an area for storing unique

11   information,

12   the service providing program comprising:

13   a service requesting step where the first apparatus

14. requests a second apparatus to provide a service desired by

15   the current user, the second apparatus being one of the plurality

16   of other apparatuses;

17   a unique information transmitting step where if a

18   recording medium of the current user is locally connected to

19   the first apparatus and stores unique information, the first

20   apparatus reads the unique information in the locally connected .

21   recording medium and transmits the read unique information

22   to the second apparatus via the network; and

23   a service providing step where the first apparatus

24   receives a customized service from the second apparatus and

25   provides the received service to the current user, wherein

26   the customized service is generated at the second apparatus

27   by customizing the desired service according to the transmitted

28   unique information.

1   32. A recording medium that is transportable and locally

2   connectable to each Internet terminal, which runs a specialized

3   Internet browser, and stores cookie information used through

4   the Internet browser,

5   wherein if an Internet terminal is locally connected

6   to the recording medium, a Web site that is connected to the

7   Internet terminal via the Internet stores and reads cookie

8   information into and from the recording medium through the

9   Internet browser.

1   33. The recording medium of Claim 32,

2   wherein the stored cookie information has been encrypted

3   using a public key corresponding to a secret key that has been

4   obtained under a public key cryptosystem and is stored in the

5   . Web site.

1   34. The recording medium of Claim 32 comprising:

2   . a secure data area that stores a media identifier of

3   the recording medium;

4   a device authentication unit operable to perform device

5   authentication with the locally connected Internet terminal;

6   and

7   a reading prohibition unit operable to prohibit the

8   locally connected Internet terminal from reading data in the

9   secure data area, if the device authentication has ended in

10 failure.

1   35. The recording medium of Claim 34,

2   wherein the encrypted and stored cookie information

3   is to be decrypted using a decryption key generated from the

4   media identifier and a user password designated by a user assigned

5   the recording medium.